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National Intelligence Council Memorandum

Russian Strategic Forces Under START II

Key Points

The elimination of MIRVed ICBMs and the questionable status of the heavy bomber force reduce Russia's options for fielding a force close to 3,500 warheads. However, ICBM provisions negotiated late in the process give the Russians additional flexibility to achieve such a force.

Russia's cheapest option in the short term would be to keep older SLBMs, deploy a large force of single-RV ICBMs, and attempt to retrieve all of its bombers from Ukraine. If this option were pursued, significant portions of the strategic nuclear forces would be obsolete by 2000 to 2010.

The more likely option--more cost effective in the long run--would be to deploy a smaller, but more modern, force of 3,000 warheads or less.

We expect the Russians to deploy three new missiles in the next 10 years:

[REDACTED]

[REDACTED]

This memorandum was prepared by the National Intelligence Officer for Strategic Programs. It is based on discussions among Intelligence Community analysts at a meeting held on 7 January 1993. It was coordinated with representatives of CIA, DIA, State/INR, NSA, Air Force and Navy.

~~All portions classified Secret NOFORN~~

[REDACTED]
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Russian Strategic Forces Under START II

Introduction

The nuclear arms reduction agreement signed on 3 January 1993 by Presidents Bush and Yel'tsin accelerates cuts in strategic nuclear forces. Moreover, it requires by 2003 the elimination of all land-based MIRVed ICBMs, including the 10-reentry vehicle (RV) SS-18 heavy ICBM. [REDACTED]

Conservative military and political elements expressed dissatisfaction with Yel'tsin's agreement in June to eliminate all MIRVed ICBMs. Their desire to have a more robust ICBM force and to give Russia the option to reach the 3,500-warhead limit probably led the Russians to insist on the right to convert some SS-18 silos currently housing MIRVed missiles for an SS-25-class single-warhead ICBM, and to download some six-RV SS-19s to a single-RV missile. [REDACTED]

The START II Agreement

Under the terms of START II, Russia and the United States are required to reduce their strategic offensive nuclear forces in two phases:

Phase I: 7 years after START entry into force

- Reductions to 3,800-4,250 warheads*
- 1,200 MIRVed ICBM warheads*
- 650 reentry vehicles on heavy ICBMs (SS-18s)*
- 2,160 SLBM warheads*

Phase II: 2003

- Reductions to 3,000-3,500 warheads*
- All land-based MIRVs eliminated*
- 1,700-1,750 SLBM warhead sublimit*

ICBMs

The Russians, as evidenced by their efforts late in the negotiations, want to maintain as large an ICBM force as possible, as cheaply as they can. START II allows 90 SS-18 silos to be converted to house SS-25-class missiles and permits the downloading of 105 six-RV SS-19s to a single RV

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configuration.¹ [REDACTED]

[REDACTED] START I and II do not preclude the Russians from converting other ICBMs silos-- [REDACTED]

Conversion of SS-18 Silos

Under START II, conversion of SS-18 silos requires a five-meter reduction in the usable depth of the silo--to be accomplished by pouring concrete in the bottom of the silo--and the installation of a collar near the top of the silo with an aperture diameter no greater than 2.9 meters. These measures would make it impossible to install an SS-18 without reversing the conversion:

[REDACTED]

Moreover, START II requires the elimination of all deployed and nondeployed SS-18 missiles and canisters--including any converted for space-launch purposes--prior to January 1, 2003.

[REDACTED]

[REDACTED]

¹START I provisions allow downloading a maximum of four warheads. Because the SS-19 was declared a six-RV system, downloading this system to a single warhead was not permitted. It is permitted by START II, however.
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[REDACTED]

[REDACTED]

SS-25-Class ICBMs

Silo-Based. Russia plans to base an SS-25-class ICBM, now in development, in existing SS-18 and SS-19 silos. Such plans reflect the desire to maintain a strong ICBM force--traditionally the heart of Soviet strategic forces--by using the existing silo-based infrastructure, rather than incurring the high resource and manpower costs associated with significant additional mobile basing. [REDACTED]

The right to keep a substantial number of its hardest silos for new ICBMs and to retain downloaded SS-19s will enable Russia to deploy, at relatively low cost, a force of 260 silo-based, single-RV ICBMs--in 90 SS-18 silos and 170 SS-19 silos in Russia. [REDACTED]

A larger force of 350 silo-based ICBMs is also possible, [REDACTED]

[REDACTED] To go beyond 350, Russia would probably build new silos, an option the Treaty does not preclude. However, we believe construction of new silos is unlikely because of the significant new investment that would be required. [REDACTED]

Road Mobile. The current road-mobile force consists of 351 launchers, [REDACTED] We expect these missiles to be replaced [REDACTED]

Nevertheless, some Russians have discussed the possibility of deploying as many as 900-1,000 ICBMs under START II. Such numbers would require new ICBM silos or additional road-mobile bases. [REDACTED]

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[REDACTED]

[REDACTED] In any case, we consider a force of more than 500 mobile ICBMs highly unlikely because of high manning and materiel costs. [REDACTED]

[REDACTED]

Downloading the SS-19 ICBM

The Russians will be able to retain their 170 SS-19 silos--of which 105 could house downloaded SS-19 missiles. With refurbishment, these missiles could remain in the operational force well into the next decade.

[REDACTED]

The Russians probably view retaining 105 downloaded SS-19s as an effective way to postpone the expense of producing another hundred or so new missiles.

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[REDACTED]

SLBMs

Russia's SSBN force will acquire greater relative significance under START II--about half the permitted warheads. Even so, platforms, equipment, material, and personnel will be significantly reduced. Strategic naval forces will be substantially scaled back-

[REDACTED]

[REDACTED]

We expect the Russian navy to experience major difficulties in safely reducing the SSBN force.

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]
[REDACTED] Russian military officials have stated that they have plans for a new common missile, presumably for land-based and sea-based platforms. The sea-based version of this common missile and the solid-propellant missile for the new SSBN may be one and the same. [REDACTED]

We are uncertain whether the Typhoon will retain its current 10-RV SS-N-20 missile or have a new six-RV missile. [REDACTED]

[REDACTED]
[REDACTED] In the short term, it would be easier and cheaper to retain the current SS-N-20 missile. [REDACTED]

[REDACTED]
Another factor that could influence the Russians to keep the SS-N-20 is the possibility of another deeper reduction in strategic forces after START II--below 2,500 warheads. In this case, they might choose to eliminate the Typhoon SSBN.
[REDACTED]

In the absence of a major modernization program in the 1990s, however, the Russian SLBM force will face block obsolescence in the 2000 to 2010 period. We believe it unlikely that the Russians would be capable of sustaining production and deployment programs to modernize both missile systems simultaneously, and to deploy new SLBMs for a new SSBN.
[REDACTED]
[REDACTED]

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[REDACTED]

Heavy Bombers

The bomber force under START II will have a higher percentage of the total warheads than under START I; however, we judge its role will not match its share of the weapons.

[REDACTED]

START II will count heavy bombers as equipped, rather than discounting the weapons, as under START I. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

START II allows up to 100 non-ALCM-equipped heavy bombers to be reoriented to a conventional role. This provision was designed for US heavy bombers, but it could be used to reconfigure the 46 Bear G bombers in Russia to carry conventional armaments. We do not expect Bear Gs to be nuclear-equipped by 2003. [REDACTED]

Outlook

Limited Options For Russian Leadership

Under the START II agreement, Russia will preserve its traditional force mix in which ICBM launchers constitute a majority. But with the elimination of MIRVed ICBMs, half the warheads will be on SSBNs and 25 percent on single-RV ICBMs. The future composition of Russia's strategic nuclear forces has not yet been finalized, and the provisions of START II were designed to preserve a number of options. Nevertheless, the Russian emphasis on silo-based provisions in START II indicates a concerted effort by military planners to preserve a strong ICBM force as cheaply as possible. Russian strategic forces in 2003 will still have the yield and accuracy needed to engage hardened targets. [REDACTED]

START II is likely to be ratified by the parliament but only after a contentious debate. Adjustments in the START II agreement made during endgame negotiations probably will make the deal more acceptable to the Russian parliament, but the Treaty will continue to serve as a lightning rod for Yel'tsin's more extreme opponents and traditionally minded military officers. [REDACTED]

Since the announcement of the agreement in principle last June, START II has attracted broad criticism from opponents who argue that the agreement is inequitable and too costly to implement. Military commentators also argued that the Treaty would force Russia to surrender its historical advantage in MIRVed ICBMs in favor of SLBMs and mobile missiles, while the US will be permitted to keep its advantage, a Trident SLBM force of MIRVed hard-target-capable missiles. [REDACTED]

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Opponents of the Treaty could seize on such arguments as those presented on 30 December in The Washington Post, which editorialized, "START II...cuts unequally, shearing Moscow--and Moscow alone--of its first-strike capability. In short, the new treaty confirms American strategic superiority." [REDACTED]

The biggest impediment to START II is the ratification of START I by Ukraine. [REDACTED]
[REDACTED]

Even if START II were not ratified, or if Ukraine did not accede to START I, the Russians probably would unilaterally reduce toward the Phase I levels of START II, including reducing SS-18 heavy ICBMs, by the year 2000. We judge, however, that Russia would not unilaterally implement key provisions of START II, particularly the elimination of all MIRVed ICBM. [REDACTED]

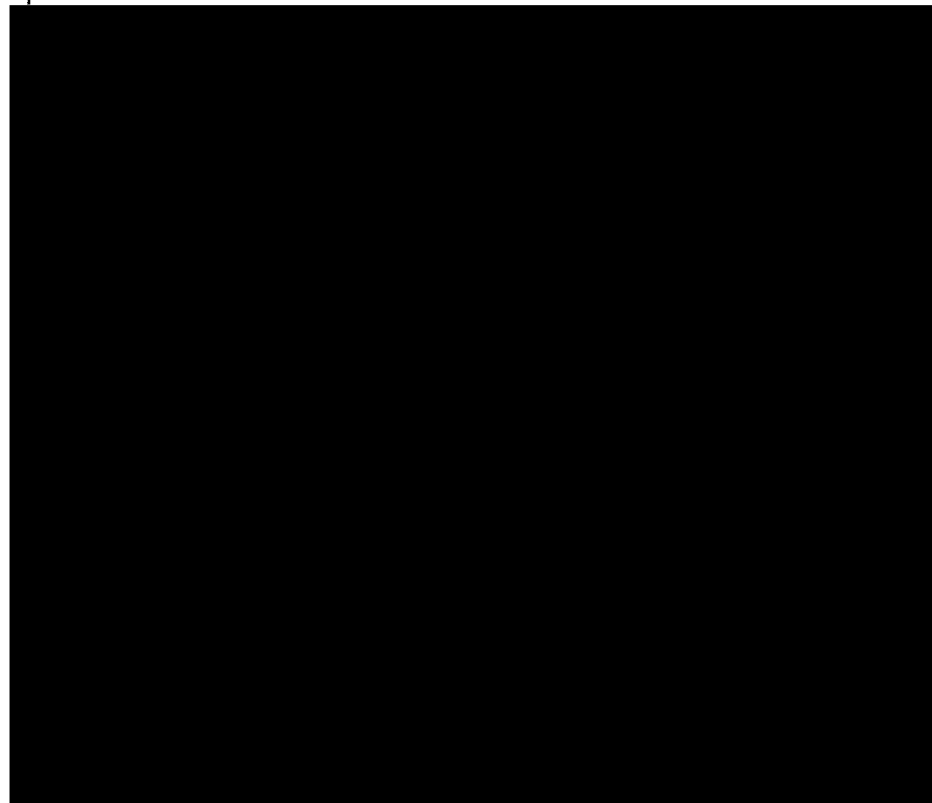
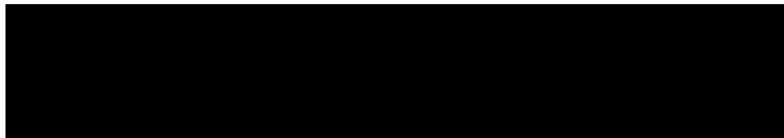
Although Russian officials have advocated deeper force reductions--down to 2,000-2,500 total weapons, Moscow is unlikely to do so unilaterally, even if START I and START II were implemented smoothly. Negotiations on reductions below 2,000-2,500 probably would be linked to continued US adherence to the ABM Treaty (and the non-deployment of space-based defenses), as well as the inclusion of Chinese, French, and British strategic nuclear forces. [REDACTED]

How Likely is a 3,500-Warhead Force?

It was politically and practically important for the Russians to negotiate provisions that would enable them to maintain a force of 3,500 warheads--equal to that permitted the United States. The Russians could demonstrate to their parliament, during the ratification process, that they were capable of achieving such a force [REDACTED]
[REDACTED]

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Thus, we believe a more likely, cost-effective choice in the long run would be a more modern, though smaller, force--at or below 3,000 weapons. Defense Minister Grachev has admitted that the Russians are unlikely to reach the upper limit, and economic constraints will ultimately drive their decision.



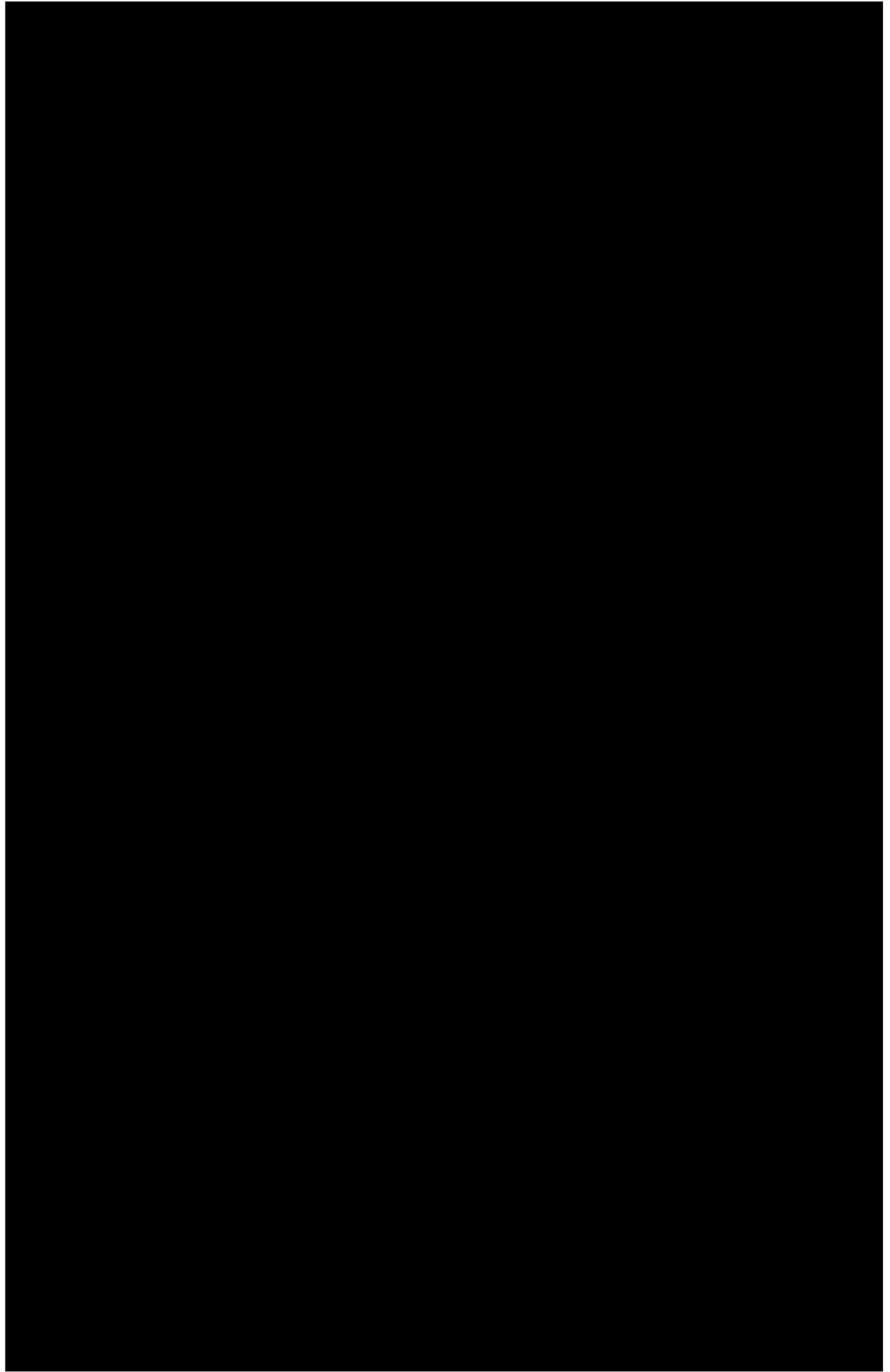
Illustrative Russian Strategic Forces - 2003

The following projections represent varying force structures under the constraints of the START II Treaty. We have uncertainties about:

- The number of ICBMs Russia will deploy;

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